UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,036	04/25/2001	Matthew Frank Trapani	00-625-B	7211

7590 09/22/2004

George I. Lee
McDonnell Boehnen Hulbert & Berghoff
32nd Floor
300 S. Wacker Drive
Chicago, IL 60606

EXAMINER
TRAN, QUOC A

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application No.** 09/843,036	**Applicant(s)** TRAPANI ET AL.
	Examiner Quoc A. Tran	**Art Unit** 2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 60/199,858.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *1/2/02 & 4/26/04*.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to application filed 04/25/2001.

2. Claims 1-40 are pending. Claims 1, 16, 20, 23, 27, 31 and 39 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable by Chen et al. US Patent No. 6,507,856 B1 issued 01/14/2003 filed 01/05/1999 (hereinafter '856), in view of Kanevsky US Patent No. 6,300,947 B1 issued 10/09/2001 filed 07/06/1998 (hereinafter '947).**

In regard to dependent claim 23, "*matching and applying a template to the infomation content*", as taught by '856 at col. 1, line 40 through col. 2, line 22 (i.e..... data characteristics of information entered into the template, and a second parser for receiving information about data characteristics to provide a return template… the information entered into the template is preferably associated with tag names and the means for merging includes a name tag map for correlating tag names of the template with tag names of the return template…), "*and if unsuccessful*", as taught at col. 7, lines 35-45 (i.e.....if c is determined to not be a leaf node in block 702...,see Fig. 11B through 11E...);

'856 does not explicitly teach, "*determining if the information content contains normalization markup, and if so: utilizing normalization markup in the information content to normalize the information content*", however as taught by '947 at col. 8, lines 15-35 (i.e.... It is to be understood that CGI refers to Common Gateway Interface (CGI) scripts which, as is known, are programs written in a script language which function as the glue or interface between HTML (Hypertext Markup Language---the document format used on the World Wide Web) pages and other programs, e.g., database programs. The phrases URL and URL/CGI are generally used interchangeably throughout this description... The interpreter module 202 then provides ... to determine whether objects (icons, pictures, texts, links, etc.) included in the web page data will fit the particular size of a user's display). Examiner reads: objects (icons, pictures, texts, links, etc.) included in the web page data will fit the particular size of a user's display), which could be interpreted as the claimed "*normalize the information content*".

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified '947 into '856 to provide a way to determine if the information content contains normalization markup, and if so: utilizing normalization markup in the information content to normalize the information content. One of ordinary skill in the art would have been motivated to perform such a modification for dynamically display information content (a text or language) regular and consistent, especially with respect to spelling or style from any type of devices and associated screen provided by users, as taught by '947 at col. 2, lines 20-55 (i.e. Advantageously, any type of display device and associated screen can be provided by a user: e.g., webphone or palmtop. Also, any size window may be displayed on such screen...). Examiner reads: dynamically display information content (a text or language) regular and consistent, which could be interpreted as the claimed "*normalize the information content*".

In regard to dependent claim 24, incorporate substantially similar subject matter as cited in claim 23 above, and in further view of the following, and is similarly rejected along the same rationale.

"*applying pattern recognition and weighting heuristics on he infomation content to normalize the information content*", as taught by '947 at col. 15, lines 1-10 (i.e..... in FIG. 13, unification of links under the same topic ... Automatic topic identifications of web content can be done by comparing frequencies ... identifying whether two words are semantically related...), also as taught by '947 at col. 15, line 67 through col. 16, line 10 (i.e.... The prioritizer module 802 provides the web page data for use by modules 904 and 905. Objects that have higher priority are less likely to be stripped (deleted and/or moved to another page, object, etc.) from a web page as compared to objects with lower priority. Similarly, semantic interpreter 905 uses priority data to decide what operations in modules 901, 902, 903 should be performed...). Examiner reads: prioritizer module and higher priority, which could be interpreted as the claimed "*pattern recognition and weighting heuristics* ".

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified '947 into '856 to provide a way to determine if the information content contains normalization markup, and if so: applying pattern recognition and weighting heuristics on the infomation content to normalize the information content. One of ordinary skill in the art would have been motivated to perform such a modification for dynamically display information content (a text or language) regular and consistent, especially with respect to spelling or style from any type of devices and associated screen provided by users, as taught by '947 at col. 2, lines 20-55 (i.e. Advantageously, any type of display device and associated screen can be provided by a user: e.g., webphone or palmtop. Also, any size window may be displayed on such screen...).

In regard to dependent claim 25, " *wherein the template normalizer dymamically changes the infomation content to match the template",* as taught by '856 at col. 1, line 40 through col. 2, line 22 (i.e..... data characteristics of information entered into the template, and a second parser for receiving information about data characteristics to provide a return template... the information entered into the template is preferably associated with tag names and the means for merging includes a name tag map for correlating tag names of the template with tag names of the return template. The first XML document may include information having a name and a value and the first parser parses the first XML document into name and value pairs. The means for merging may include a constraint set for identifying tag names used in multiple instances...).

In regard to dependent claim 26, incorporate substantially similar subject matter as cited in claim 24 above, and in further view of the following, and is similarly rejected along the same rationale.

In regard to independent claim 27, "*determining node criteria; nodes in the document tree according to the determined criteria; and determining parent-child relationships between the weighted nodes based on the nodes to produce a normalized document tree* ", as taught by '856 at col. 6, lines 42-49 (i.e.... two template structures are depicted, one in character array format 605 (FIG. 10A), and the other in tree structure 615 (FIG. 10B)...), also as taught by '856 at col. 6, line 66 through col. 7, line 5 (i.e.... each node and determine tag names both ancestors (i.e., parents) and descendants (i.e., children) to process each node for matching the first document to the second document as described above. Other matching/merging techniques may also be implemented...).

'856 does not explicitly teach, "*determining weight node criteria*", however as taught by '947 at col. 3, lines 30-35 (i.e.... Nodes represent a set of questions that are asked at this node and links to other nodes depend on answers to those questions. The other nodes that are connected to the first node in the decision trees represent another set of questions and so on. For example, at the first node A of a web related decision tree...), also as taught by '947 at col. 15, line 67 through col. 16, line 10 (i.e.... The prioritizer module 802 provides the web page data for use by modules 904 and 905. Objects that have higher priority are less likely to be stripped (deleted and/or moved to another page, object, etc.) from a web page as compared to objects with lower priority.

Similarly, semantic interpreter 905 uses priority data to decide what operations in modules 901, 902, 903 should be performed...).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified '947 into '856 to provide a way to produce normalization document tree base upon weight node criteria, wherein nodes in the document tree according parent-child relationships. One of ordinary skill in the art would have been motivated to perform such a modification for dynamically display information content (a text or language) regular and consistent, especially with respect to spelling or style (examiner reads as the same as normalizing information content) from any type of devices and associated screen provided by users, as taught by '947 at col. 2, lines 20-55 (i.e. Advantageously, any type of display device and associated screen can be provided by a user: e.g., webphone or palmtop. Also, any size window may be displayed on such screen...).

In regard to dependent claim 28, incorporate substantially similar subject matter as cited in claim 27 above, and in further view of the following, and is similarly rejected along the same rationale.

"*nodes in a table*", as taught by '856 at col. 8, lines 24-26 (i.e.... DTD tree node from the template in a tree structure ... name tag map table..),

"*and attempting to match the table to a predefined pattern of weights, and if successfull: extracting data in response to the predefined pattern* ", as taught by '856 at col. 4, lines 43-48 (i.e....DTD tree node from the template in a tree structure, to match their counterparts in the XML DOM tree or the serialized array using the XML name tag map table. If a match is found, the corresponding value of the first XML message is retrieved and treated as the value associated with the current name tag...).

In regard to dependent claim 29, incorporate substantially similar subject matter as cited in claims 27-28 above, and is similarly rejected along the same rationale.

In regard to dependent claim 30, "*applying changes to the document tree according to a normalization markup comprising dropping nodes, moving nodes, partitioning nodes into folders, and calling user defined formatting rules on the nodes*", as taught by '947 at col. 3, lines 20-60 (i.e.... to formatting web pages via decision trees with questions about web page appearance, i.e., semantic interpretation .... Nodes represent a set of questions that are asked at this node and links to other nodes ... Is this an icon? This node leads to two different nodes. For YES answer, A is connected to B1 and for NO answer A is connected to B2. The node B1 may contain a question: Is there a title in this icon? A node B2 can contain questions that clarify how an object in question is represented (Is this a link?, Is this a picture?, etc.) In statistical trees questions (splits) are found statistically (as explained in the text). In a binary tree, each (parent) node is connected with two (son) nodes, each of which is a parent node for next two (son) nodes on lower level. Nodes in binary trees correspond splits of sets in two subsets (that are interpreted as questions)... the user request signal including information relating to at least one display screen-related attribute associated with the user's display screen and information specific to the user's request...).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified '947 into '856 to provide a way to determine if the information content contains normalization markup, and if so: applying changes to the document tree according to a normalization markup comprising dropping nodes, moving nodes, partitioning nodes into folders, and calling user defined formatting rules on the nodes. One of ordinary skill in the art would have been motivated to perform such a modification for dynamically display information content (a text or language) regular and consistent, especially with respect to spelling or style from any type of devices and associated screen provided by users, as taught by '947 at col. 2, lines 20-55 (i.e. Advantageously, any type of display device and associated screen can be provided by a user: e.g., webphone or palmtop. Also, any size window may be displayed on such screen...).

In regard to independent claim 1, is directed to a system for performing the method of claims 23, 27 and 30, and is similarly rejected along the same rationale.

In regard to dependent claim 2, is directed to a system for performing the method of claims 24 and 27-28, and is similarly rejected along the same rationale.

In regard to dependent claim 3, is directed to a system for performing the method of claims 26 and 29, and is similarly rejected along the same rationale.

In regard to dependent claim 4, is directed to a system for performing the method of claim 24, and is similarly rejected along the same rationale.

In regard to dependent claim 5, is directed to a system for performing the method of claims 23, 27 and 30, and further in view of the following, and is similarly rejected along the same rationale.

"the document object tree", as taught by '856 at col. 3, lines 65-67 (i.e.... DOM (Document Object Model) tree parsing or serialization prepares the first document in a suitable data structure, such as tree or array...).

In regard to claim 6, 9, 11 and 20, is directed to a system for performing the method of claim 23, and are similarly rejected along the same rationale.

In regard to claim 7, 16 and 21, is directed to a system for performing the method of claims 24, 27, and are similarly rejected along the same rationale.

In regard to dependent claim 8, is directed to a system for performing the method of claim 30, and is similarly rejected along the same rationale.

In regard to dependent claim 10, is directed to a system for performing the method of claims 23-24, and is similarly rejected along the same rationale.

In regard to dependent claims 12, and 22, are directed to systems for performing the method of claims 23, 27 and 30, and further in view of the following, and is similarly rejected along the same rationale.

"display by a Pc-based browser that utilizes hypertext markup language (HTML)", as taught by '856 at col. 6, lines 10-15 (i.e.... client side application, which may serialize tree elements into an array of hyper-text markup language (HTML) components 355', or a server side stand-alone application...).

In regard to dependent claims 13-14, is directed to a system for performing the method of claims 23, 27 and 30, and further in view of the following, and is similarly rejected along the same rationale.

"document object model (DOM)", as taught by '856 at col. 3, lines 65-67 (i.e.... DOM (Document Object Model) tree parsing or serialization prepares the first document in a suitable data structure, such as tree or array...).

In regard to dependent claim 15, is directed to a system for performing the method of claims 23, 27 and 30, and further in view of the following, and is similarly rejected along the same rationale.

" QDOM for generating a document object tree", as taught by '856 at col. 2, lines 25-50 (i.e.... document object model tree and an array... the program storage device, the step of providing an input document may include the step of providing an input document on a template having data field therein for data entered, the data fields being labeled with name tags to identify the data. The step of compiling may include the step of parsing the input document into name tag and value pairs in one of a node tree format and an array format. The step of comparing the name tags may include the step of providing a name tag map to correlate equivalent name tags. The step of providing a return document format may include the step of providing looping information to identify name tags according to a constraint set such that name tags employed in multiple instances are identified. The constraint set may provide higher-level tag names to identify the tag names used in multiple instances).

In regard to dependent claim 17, is directed to a system for performing the method of claims 23-24, and 27, and is similarly rejected along the same rationale.

In regard to dependent claim 18, is directed to a system for performing the method of claims 23, 27 and 30, and further in view of the following, and is similarly rejected along the same rationale.

"display by a Pc-based browser that utilizes hypertext markup language (HTML)", as taught by '856 at col. 6, lines 10-15 (i.e.... client side application, which may serialize tree elements into an array of hyper-text markup language (HTML) components 355', or a server side stand-alone application...).

In regard to dependent claim 19, is directed to a system for performing the method of claims 24 and 27, and further in view of the following, and is similarly rejected along the same rationale.

"document tree represents a hierarchical representation of information in the document tree", as described by '947 at col. 20, lines 20-50 (i.e.... Each split of n objects into k subsets gives rise to k new smaller screens or web pages (block 1805). These screens or web pages can be organized hierarchically (block 1806) in such a way that a user first views a page 1 that is linked to other pages. Alternatively, the adaptation can be performed such that a user views a general "introductory" page that has links to all other k pages including a definition of each page. ...).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified '947 into '856 to provide a way to produce normalization document tree, wherein document tree represents a hierarchical representation of information in the document tree. One of ordinary skill in the art would have been motivated to perform such a modification for dynamically display information content (a text or language) regular and consistent, especially with respect to spelling or style (examiner reads as the same as normalizing information content) from any type of devices and associated screen provided by users, as taught by '947 at col. 2, lines 20-55 (i.e. Advantageously, any type of display device and associated screen can be provided by a user: e.g., webphone or palmtop. Also, any size window may be displayed on such screen...), also provide to user the ability of display plurality of documents hierarchically from any type of devices and associated screen provided by users, as taught by '947 at col. 1, lines 10-35 (i.e.. ...Several links, hierarchically...).

5. **Claims 31-40 are rejected under 35 U.S.C. 103(a) as being unpatentable by Chen et al. US Patent No. 6,507,856B1 issued 01/14/2003 filed 01/05/1999 (hereinafter '856), in view of Sato et al. US Patent No. 6,681,388 B1 issued 01/20/2004 filed 10/01/1999 (hereinafter '388).**

In regard to independent claim 31, "*receiving data; and storing information relating to the data into ... and wherein the stored information describes the document object tree and tree dependencies as a mutable object*", as taught by '856 at col. 2, lines 25-50 (i.e.... The first parser preferably parses the first XML document to provide tag name and value information in a format of one of a document object model tree and an array... storage device, the step of providing an input document may include the step of providing an input document on a template having data field therein for data entered, the data fields being labeled with name tags to identify the data. The step of compiling may include the step of parsing the input document into name tag and value pairs in one of a node tree format and an array format...), also as taught by ‘856 at col. 6, line50 through col. 7, line (i.e.... modification visit node(c), where c is a current node ...).

‘856 does not explicitly teach, “ *storing input data into a plurality of arrays, wherein the plurality of arrays utilize re-usable buffers...* ”, however as described by ‘388 at col. 1, lines 13-45 (i.e..... A plurality of arrays...the data redistribution are copied to a consecutive address region in one buffer at the time of executing the program...), also as taught by ‘388 at col. 2, lines 40-45 (i.e.. rearranging method for performing a distribution processing of an array in a multi processor system including a plurality of processors that share a single memory...).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified ‘388 into ‘856 to provide a way to provide the plurality of arrays, wherein the plurality of arrays utilize re-usable buffers to store and re-use receiving data and wherein the stored information of data describes the document object tree and tree dependencies as a mutable object. One of ordinary skill in the art would have been motivated to perform such a modification for more efficiently processing result, time saving when parsing large documents to create the corresponding DOM trees, moreover speed up the process of nodes serializing and de-serializing in DOM trees as taught in ‘856 col. 2, line 53 through col. 3, line 35 (i.e.... the parsing time...DOM trees...the serialization...de-serialized...).

In regard to dependent claim 32, "*transforming the document object tree, wherein the transformed document object tree is represent by the single mutable object*", as taught by '856 at col. 2, lines 30-52 (i.e.. first XML document and its DTD, and generate a DOM tree or a serialized name/value pair array ...The DTD parser transforms the DTD with repeatable and optional fields into a template in tree structure or serialized array with special markers around loop header nodes or name tags. Optional fields may include a second business address or phone number, for example)

In regard to dependent claim 33, incorporate substantially similar subject matter as cited in claim 31 above, and in further view of the following, and is similarly rejected along the same rationale.

"*adding an array... as the received data grows in size*", as taught by '856 at col. 3, line 65 through col. 4, line 11 (i.e.... DOM tree parsing or serialization prepares the first document in a suitable data structure, such as tree or array, for efficient processing and matching ... Due to looping, the same tag names may occur multiple times in the DOM tree or the array. Looping includes reusing a format for data entry, for example, a purchase order may include more than one item to be ordered. The same code is used to generate fields for data entry on a template, looping generates the fields needed....).

In regard to dependent claim 34, incorporate substantially similar subject matter as cited in claim 31 above, and in further view of the following, and is similarly rejected along the same rationale.

"*wherein the plurality of arrays are used to hold values that represent properties of a node of the document object tree*", as taught by '856 at col. 2, lines 43-50 (i.e.. storage device, the step of providing an input document may include the step of providing an input document on a template having data field therein for data entered, the data fields being labeled with name tags to identify the data. The step of compiling may include the step of parsing the input document into name tag and value pairs in one of a node tree format and an array format ...).

In regard to dependent claim 35, incorporate substantially similar subject matter as cited in claim 31 above, and is similarly rejected along the same rationale.

In regard to dependent claim 36, incorporate substantially similar subject matter as cited in claims 31 and 34 above, and is similarly rejected along the same rationale.

In regard to dependent claim 37, "*normalizing the document object tree model by a template normalizer for applying templates to the document object tree*", as taught by '856 at col. 3, lines 65-67 (i.e..... DOM tree parsing or serialization prepares the first document in a suitable data structure, such as tree or array ... The same code is used to generate fields for data entry on a template, looping generates the fields needed...), also as taught by '856 at col. 4, lines 43-48 (i.e..... DOM tree parsing or serialization prepares the first document in a suitable data structure, such as tree or array ... The same code is used to generate fields for data entry on a template, looping generates the fields needed... DTD tree node from the template in a tree structure, to match their counterparts in the XML DOM tree or the serialized array using the XML name tag map table. If a match is found, the corresponding value of the first XML message is retrieved and treated as the value associated with the current name tag…).

In regard to dependent claim 38, "*normalizing the document object tree model by an automatic normalizer for applying pattern recognition and weighting heuristics on the document tree to produce a normalized document tree* ",as taught by '856 at col. 3, lines 35-50 (i.e.… Document Object Model (DOM) tree parsing or serialization, return document template generation, constraint set design, and a document merging algorithm are included in an automated document merging and exchange system, in accordance with the present invention. Although described in terms of XML, DTD and DOM languages/codes, other languages/codes may be implemented in accordance with the invention …), also as taught by '856 at col. 4, lines 43-48 (i.e..… DOM tree parsing or serialization prepares the first document in a suitable data structure, such as tree or array … The same code is used to generate fields for data entry on a template, looping generates the fields needed… DTD tree node from the template in a tree structure, to match their counterparts in the XML DOM tree or the serialized array using the XML name tag map table. If a match is found, the corresponding value of the first XML message is retrieved and treated as the value associated with the current name tag…).

In regard to independent claim 39, "*matching the document tree by utilizing a template markup language comprising regular expression; and applying changes to the document tree according to the template markup language* ",as taught by '856 at col. 4, lines 43-48 (i.e.…DTD tree node from the template in a tree structure, to match their counterparts in the XML DOM tree or the serialized array using the XML name tag map table. If a match is found, the corresponding value of the first XML message is retrieved and treated as the value associated with the current name tag…).

In regard to dependent claim 40, “*wherein the document tree is represented by a plurality of nodes, and wherein the template markup language comprises dropping at least one of the plurality of nodes, moving at least one of the plurality of nodes, partitioning at least one of the plurality of nodes into folders, and calling user defined formatting rules on at least one of the plurality of nodes* “,as taught by ‘856 at col. 5, lines 15-18 (i.e.…Referring now to FIG. 3, the DTD of FIG. 2 is depicted in a graphical tree structure. Oval-shaped nodes 40 represent data elements…) also as taught by ‘856 at col. 8, lines 20-30 (i.e.… merge algorithm as described in FIGS. 11A-E is an XML return document generated automatically, by either sequentially scanning the name tags from the template in an array structure, or recursively traversing the DTD tree node from the template in a tree structure, to match their counterparts in the XML DOM tree or the serialized array using the XML name tag map table. If a match is found, the corresponding value of the first XML message is retrieved and treated as the value associated with the current name tag…).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Meltzer et al	U.S. Patent No. 6,226,675	issued 05/01/2001	filed 10/16/1998
Burkett et al	U.S. Patent No. 6,671,853 B1	issued 12/30/2003	filed 07/15/1999

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quoc A. Tran whose telephone number is (703) 305-8781, "**After mid-Oct, 2004, the examiner can be reach at (571) 272- 4103**". The examiner can normally be reached on Monday through Friday from 8:30AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER

Quoc A. Tran
Patent Examiner
Technology Center 2176
September 14, 2004